

Forcing Flower Bulbs

by Richard Jauron

Bulb forcing can bring the bright colors and fragrant aromas of spring indoors during winter. Daffodils, tulips, hyacinths, crocuses, and other spring flowering bulbs can be forced indoors from December through March. Paperwhite narcissuses are also forced indoors.

Choosing

Purchase bulbs from a local garden center as soon as they arrive in the fall. Bulbs are generally available from September through November. Bulbs also can be purchased from mail-order nurseries.

Choose bulbs recommended for forcing; see list on page 3. They should be large, firm, and unblemished. So-called “bargain” bulbs and damaged bulbs often lead to disappointments. Large, high quality bulbs are needed because bulbs contain the immature flowers and food required to produce flowering plants.

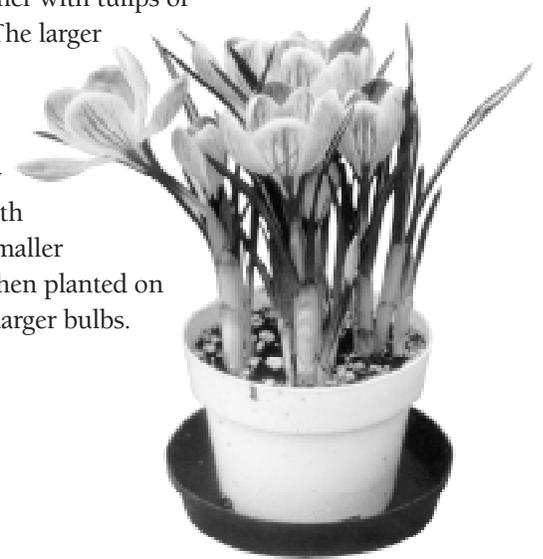
Planting

Most bulbs are forced in a well-drained, commercial potting soil. Gardeners can prepare their own medium by mixing one part garden soil, one part peat moss, and one part perlite.

Containers for forcing may be metal, ceramic, plastic, or clay. Almost any container is suitable as long as it has one or more drainage holes and is twice as deep as the bulbs to be planted.

The first step in planting is to partially fill the container with potting soil. Then gently place the bulbs on the soil surface. Adjust the soil level until the bulb tips are even with the rim of the container. Once the bulbs are in place, add additional potting soil until the bulb tips show just above the soil surface. Leave about ½-inch between the soil surface and the rim of the container. Water the newly planted bulbs from the top or partially submerge the pots in a tub of water until the soil surface is wet. Finally, write the name of the bulb variety and planting date on a label and insert into each pot.

Different types of bulbs can be planted in a single container for a colorful indoor display. For example, crocuses or grape hyacinths can be planted in a container with tulips or daffodils. The larger bulbs are planted first and completely covered with soil. The smaller bulbs are then planted on top of the larger bulbs.



Planting How-to



1. Choose a container that has drainage holes and is twice as deep as the bulbs to be planted.

2. Partially fill the container with potting soil.



3. Arrange the bulbs on the soil surface. Avoid injuring the bulbs; don't press them into the soil.



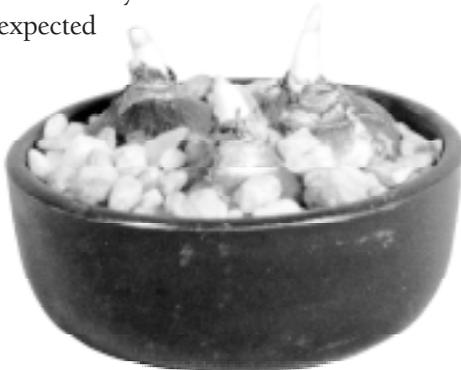
Plant flat-sided bulbs, such as tulips, with the flat side facing the edge of the container. This allows the first leaves to form a border around the edge of the pot. Tulips are more attractive when planted densely (about six bulbs per 6-inch pot).



4. Fill the container with the soil mix until bulb tips show just above the soil surface.

Paperwhite narcissus

Paperwhite narcissus do not require a cold storage period to flower. They may be grown in potting soil or in a pebble-filled tray at 60 to 65°F. Flowers can be expected in 5 to 6 weeks.



Hyacinths

Hyacinths are quite handsome when planted singly in a 4-inch pot, but also are attractive when planted in groups of 3, 5, or more. Daffodils, paperwhite narcissus, crocuses, muscari, and other bulbs are most effective when planted in groups of 3, 5, or more.

Pre-cooled hyacinth bulbs may be grown in water-filled, hourglass-shaped vases called hyacinth glasses.



Bulbs recommended for forcing

Crocuses

Variety	Color
Flower Record	purple
Jeanne d'Arc	white
Mammoth Yellow	yellow
Pickwick	white with blue stripes
Remembrance	lavender

Daffodils

Variety	Color
Barrett Browning	white, orange cup
Bridal Crown	double, white, orange center
Carlton	golden yellow
Dutch Master	golden yellow
Flower Record	white, orange-rimmed yellow cup
Geranium	white, orange cup
Ice Follies	white, creamy yellow cup
Las Vegas	white, canary yellow cup
Mount Hood	ivory white
Tête à Tête	yellow miniature
Unsurpassable	yellow

Grape Hyacinth (Muscari)

Variety	Color
Blue Spike	double, blue
Early Giant	deep blue

Hyacinths

Variety	Color
Amethyst	lilac purple
Blue Jacket	navy blue
Carnegie	white
City of Haarlem	soft primrose yellow
Delft Blue	porcelain blue
Jan Bos	pinkish red
Lady Derby	rose pink
L'Innocence	ivory white
Pink Pearl	deep pink
Professor de Hertogh	bluish purple
Yellow Queen	yellow

Paperwhite Narcissus

Variety	Color
Bethlehem ('Nony')	creamy white, yellow cup
Galilee ('Gallilea')	pure white
Grand Soleil d'Or	yellow, orange cup
Israel ('Omri')	creamy yellow, yellow cup
Jerusalem ('Sheleg')	pure white
Nazareth ('Yael')	soft yellow, bright yellow cup
Ziva	pure white

Tulips

Variety	Color
Angelique	double, pink
Annie Schilder	orange
Apricot Beauty	apricot
Attila	light purple violet
Bellona	golden yellow
Bestseller	coppery orange
Christmas Marvel	cherry pink
Couleur Cardinal	deep scarlet
Esther	soft pink with lighter edges
Île de France	cardinal red
Kees Nelis	red-edged yellow
Leen van der Mark	cardinal red-edged white
Merry Widow	red-edged white
Monte Carlo	double, yellow
Negrita	reddish purple
Passionale	lilac purple
Paul Richter	scarlet red
Pax	white
Peerless Pink	pink
Prinses Irene	orange with purple flames
Shirley	white-edged purple



Chilling

After planting, the potted bulbs need to be exposed to temperatures of 40 to 45°F for 12 to 16 weeks. The bulbs will not bloom properly without the cold period. Critical root growth and flower development occur during this period.

The best places for cold storage are a cool cellar, a refrigerator, or an outdoor trench. For best results, do not allow the bulbs to freeze, water the bulbs regularly throughout the forcing period, and keep them in complete darkness.

If chilling in a refrigerator where apples or other fruit also are being stored, first place the potted bulbs in a plastic bag. Ripening fruit, such as apples, give off ethylene gas that can harm plant growth. During cold storage, remove the plastic bag containing the potted bulbs approximately once a month. Open the bag for 1 or 2 hours to allow for air exchange, then reseal the plastic bag and place it back in the refrigerator.

Annual flower beds and the vegetable garden are possible sites for outdoor storage. Trenches should be at least 1 foot deep and wide enough to accommodate the containers. Place the pots in the trench, place soil around the containers, then cover with several inches of straw.

After 12 weeks of cold storage, roots should be visible through the drainage holes. Also, yellow shoots should have begun to emerge from the bulbs.



If the bulbs are at the proper stage of development after 12 weeks, move the containers to a warmer (50 to 60°F) location that receives low to medium light. Leave them in this area until the shoots turn green, usually 4 to 5 days. Then move them to a brightly lighted, 60 to 65°F location. Keep the plants well watered. On average, bulbs will flower 3 to 4 weeks after removal from cold storage. For a succession of blooms during the winter, remove a few pots from cold storage every 2 weeks.

After blooming

Tulips, hyacinths, and most other spring flowering bulbs are usually discarded after forcing. Most don't bloom again when planted outdoors and attempts to force them again are usually unsuccessful. Daffodils, however, are an exception. Many forced daffodil varieties perform well when planted outdoors. Paper-whites are not hardy outdoors and should be discarded after flowering. Hyacinths forced in hyacinth glasses also should be discarded.

The care after flowering is important if attempting to save forced bulbs. After flowering, remove the spent flowers and place the plants in a sunny window. Water regularly until the foliage begins to yellow. At this point, gradually withhold water until the foliage withers and dries. Carefully remove the bulbs from the potting soil, allow them to dry for 2 or 3 weeks, then store them in a cool, dry place until fall planting.

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